ABSTRACT

A low-noise, fast-settling bias circuit includes a first and a second low pass filter, such as RC filters. The second filter initially shorts out a resistor of the first filter with a switch (set to low impedance) in parallel. Accordingly, a capacitor of the first filter quickly charges up to the same voltage as the input bias voltage. As the second filter charges up, the switch slowly shuts off (high impedance). By this time, since the capacitor of the first filter has charged to the same voltage as the bias voltage, a large RC formed by the resistor of the first filter and the capacitor of the first filter is available to provide filtering for the desired bias current.